



ACCU=V=RG

NADAUNO

IO

드

۲

1000 100

中国电影影影影

0

....

2.

.......

MAKE ENERGY USAGE SMARTER

## Table Of Content

About Accuenergy						
Accuener	gy Meters	6				
	Acuvim 3 - Advanced Power Quality Meter	6				
	Acuvim II - Advanced Multi-Function Power & Energy Meter Series	8				
	Acuvim II - Expansion Modules	. 10				
	Acuvim II + AXM-WEB2	. 11				
	Acuvim L - Standard Multi-Function Power & Energy Meter Series	. 12				
	AcuRev 1310 - DIN-Rail Digital Panel Meter	. 14				
	EV300 - Panel Meter Series	. 16				
	AcuPanel 9100 - Pre-Wired Metering Panels	. 18				
	AcuRev 2100 - Multi-Circuit Submeter with SnapOn CT Technology	. 20				
	AcuDC 240 - DC Energy Meter	. 22				
Communi	ications & Software Solutions	24				
	AcuCloud - Cloud-Based Metering Platform	. 24				
	AcuLink 810 - Data Acquisition Gateway	. 26				
	AcuMesh - Wireless RS485 Metering Network	. 28				
Current T	ransformers	29				
	AcuCT Flex - Rogowski Coils	. 29				
	RIK Series - Rogowski Integrator Kit	. 30				
	AcuCT R - Revenue-Grade Split-Core Current Transformer	. 31				
	AcuCT mV - 333mV Split-Core Current Transformer	. 31				
	AcuCT 5A - 5A Split-Core Current Transformer	. 32				
	AcuCT Hinged - 5A Split-Core Current Transformer	. 32				
	AcuCT S113 - Solid-Core Current Transformer	. 33				
	AcuCT S77 - Revenue-Grade Solid-Core Current Transformer	. 33				
	AcuCT S220 - Switchgear Solid-Core Current Transformer	. 34				
	AcuCT S335 - Busbar Solid-Core Current Transformer	. 34				
	AcuCT S433 - Instrument Solid-Core Current Transformer	. 35				
	AcuCT S650 - Solid-Core Current Transformer	. 35				
	HAB 16555 - DC Current Sensors	. 36				
	HAK - Hall Effect Current Sensors	. 36				
	HV2 - DC Voltage Sensor	. 37				
	DC Shunts - Shunt Series	. 37				
	AcuCT C - Current Transformer Converter	. 38				



# We Are Accuenergy

Accuenergy Inc. specializes in power metering solutions that lead the industry in revenue grade energy metering, power quality analysis, ease of deployment and advanced communication methods. Our reliable power meters have been used globally to monitor electrical systems in commercial and industrial facilities, multi-tenant buildings, data centres, and cell towers for more than 20 years.

Our goal is to provide users with well-designed products that are easy to implement without sacrificing key functionality. Our pre-wired panel meters and wireless submeters are designed to offer the simplest tenant billing and metering solutions on the market, while providing ease of installation.







# ACUVIM 3



#### **Advanced Power Quality Meter**

The Acuvim 3 Series an advanced power quality and revenue grade meter. IEC 61000-4-30 Class A certified by third-party NMi for PQ. High accuracy ANSI C12.20 Class 0.1/IEC 61557-12 Class 0.1 rated. Optional 7-inch touchscreen display unit can be install in a panel or DIN rail mounted. Multi-protocol industrial communication support for IEC 61850, EtherNet/IP, Modbus, BACnet, and more.

#### **NEW PRODUCT**







B

EN55011



Modbus

ACCUENERGY.COM/ACUVIM-3



#### **Key Specifications**

- IEC 61000-4-30 Class A compliant PQ analyzer
- PMU (IEEE C37.118) for fast and reliable synchrophasor measurement
- ANSI C12.20 Class 0.1 Accuracy / IEC 62053-22 Class 0.1S active energy and IEC 62053-24 Class 0.5S reactive energy
- TOU with 8 tariff and up to 12 billing periods
- Multiple dataloggers with user-selectable logging interval and parameters
- 32 GB onboard memory for data logging and historical trend analysis

- Power quality event detection on half-cycle RMS to trigger email notification, or DO/RO
- Waveform Capture detection up to 512 samples/cycle and stored in COMTRADE or CSV file
- Fast log report, download from webpage/SFTP, or post via HTTP(S), FTP, SFTP
- Reporting EN50160 compliance report, IEEE 519 compliance report, ITIC (CBEMA) Curve, SEMI Curve with AcuCloud
- Flicker & transient measurement and logging

\*Selected models only









#### Power Quality Analyzer

Identify power system anomalies in critical infrastructure. Common voltage sags & swells on half-cycle RMS, and transient overvoltage at 32 ksps. Detect harmonic distortions caused by non-linear loads, and frequency variation deviations.

#### Datalogger Fast Log

Measure and log energy, demand, RMS, power, fundamental, THD, phase angle, unbalance parameters. Configure multiple data loggers with user-selectable file length, parameters, and logging interval. Recording interval up to 200ms to 7 days depending on parameter.

#### Waveform Capture

Detect waveform for both voltage & current power quality events up to 512 samples per cycle. Capture pre and post-trigger events up to 360 cylces. Set up PQ trigger conditions for email alert integration and save as COMTRADE files for transfer to a remote server via HTTP/FTP for analysis.

#### **PQ Compliant Reports**

Power quality compliance reports based on EN50160 for standard PQ characteristics, and IEEE 519 pass/fail report for voltage/current harmonic distortion. ITIC/CBEMBA and SEMI curve analysis for for IT equipment power tolerance.

#### **PMU Synchrophaser**

High precision, real-time measurements of voltage, current, phase angle and frequency across power distribution systems. Detects abnormal PQ events over a wide area grid for early warning alerts.

#### **Revenue Grade**

ANSI C12.20/IEC 62053-22 Class 0.1S accuracy with four-quadrant active energy monitoring for critical applications that rely on consistent, high-accuracy readings. Voltage/current halfcycle RMS, and frequency accuracy at 1 mHz, 40 to 70 Hz.

#### **Industrial Communication Protocols**

Multi-protocol support for a wide range of industry-standard protocols.

- PMU (Synchrophasor )
- Modbus-RTU via RS485
- BACnet-IP via RS485
- Dual Ethernet
- Wi-Fi
- Modbus-TCP/IP
- HTTPS Webserver
- HTTP/HTTPS Post



- IEC 61850
- EtherNet/IP
- FTP/sFTP Post
- SMTP
- SNMP
- SNTP
- DNP3 over IP



#### I/O Module Options

	AXM-IO1	AXM-IO2	AXM-IO3
Digital Input	6	4	4
Digital Output	-	2	-
Relay Output	2	-	2
Analog Inputs	-	-	2
Analog Outputs	-	2	-

Power Meter Solutions

# ACUVIM II



#### Advanced Multi-Function Power & Energy Meter Series

The Acuvim II series energy submeters are the simple, robust solution for power monitoring, power quality analysis, kW metering, and more. Designed for easy integration in almost any metering application, a wide array of plug-in expansion modules allows communication on over 15 different industry-standard protocols.

#### ACCUENERGY.COM/ACUVIM-II





#### SI





#### **Key Specifications**

EN55011

- Revenue grade ANSI C12.20 Class 0.1 & IEC 62053-22 Class 0.1s
- Built-in Modbus-RTU and BACnet-MS/TP via RS485 port
- Expand with dual RJ45, WiFi, Fiber optic, Profibus and more interfaces
- Add up to three expansion communications & I/O modules
- MV90 compatibility
- Datalogging with up to 1-second interval, max/min/ average, and instantaneous reading\*

COMTRADE Waveform file format\*

Modbus

- Threshold alarms can be set to notify users of potential issues
- Time-of-Use (TOU) capability allows time-based or tier-based rate structure\*
- Support Modbus, BACnet, IEC 61850, EtherNet/IP, IPv6, RSTP, SNMP, HTTPS, sFTP, MQTT & other protocols
- Cloud metering data storage & analytics

\*Selected models only









#### Data Logging

Essential to trend analysis and reporting, the Acuvim IIR and IIW offer a robust data logging feature where most metering parameters can be recorded for later review. The integrated real-time clock ensures logged events are accurately time stamped. 16MB of non-volatile memory is built into the meter and, by equipping the AXM-WEB2 module, an additional 8GB of memory with up to a 1-second logging interval is made available.

#### Anti-Tampering Seal

Much like a utility meter, the Acuvim II can be physically sealed to protect against tampering. All metrological programming and user-defined parameters are safeguarded with the physical seal.

#### Alarms

Quickly set over or under limit alarms for up to 16 indicated parameters with a specified time interval. If a parameter goes outside its setting limit, the alarm output is triggered, and the event is recorded with a time and date stamp for later analysis. Easy to manage and customize, the alarm can be configured using any of 80 available parameters.

#### **Power Quality Monitoring**

Power quality monitoring ensures systems run at maximum efficiency. The Acuvim IIW can detect energy deviations using harmonic analysis, event logging, and waveform capture. Facility managers can use the detailed PQ data to diagnose power quality issues before they result in system inefficiency.

#### Waveform Capture

The Acuvim IIW can record 100 groups of voltage and current waveforms. The instrument supports a settable triggering condition and provides a waveform record of 10 cycles before and after each triggering point. Data can be stored in the COMTRADE waveform file format for later analysis.

#### Time-Of-Use

Time-based tariffs can lead to higher power bills when energyintensive devices are run during peak hours. Time-of-use metering allows facility managers to reduce energy costs where TOU rates have been applied. Gain valuable insight into a facility's load profile with built-in peak analysis tools.

#### **AXM-DIN Rail Mounting Adapter**

The AXM-DIN Rail Adapter is the easy solution for panelmount Acuvim II series meters on either horizontal or vertical DIN rail.



#### IP66/NEMA4X Adapter Protection Cover

Defend against dust, water, or other contaminants: The Protection Cover is designed for all Acuvim

II panel meters. It increases the IP environmental rating of a meter's display to IP66 or NEMA 4X.



#### **Acuvim II Series Models**

	Acuvim IIR	Acuvim IIW
Application	Billing / Data Logging	Power Quality
Metering	400 Parameters	400 Parameters
Data Logging	•	•
Onboard Memory	16MB	16MB
With AXM-WEB2	8GB	8GB
Time-of-Use	٠	•
Power Quality		•



# EXPANSION MODULES

Snap-On Communication Modules for Acuvim II Series Meters



Wi Fi

#### **Acuvim II Communication Modules**

The AXM modules are designed to expand the communication capabilities of the Acuvim II meter. Easy to deploy, the field-expandable modules connect directly to the meter to boost the number of compatible communication protocols or increase the number of I/O ports.

#### ACCUENERGY.COM/AXM-MODULES

#### I/O Module Options

	AXM-IO1	AXM-IO2	AXM-IO3
Digital Input	6	4	4
Digital Output	-	2	-
Relay Output	2		2
Analog Inputs	-	-	2
Analog Outputs	-	2	-

#### **Acuvim II AXM Expansion Modules**

	Meter Only	AXM WEB2 FOLC	AXM WEB2	AXM WEB2-D	AXM WEB PUSH	AXM PROFI	AXM RS485
Modbus-RTU	•						٠
BACnet-MS/TP	•						
DNP 3.0 Over IP		•	•	•	•		
IEC 61850		•	•	٠			
Modbus-TCP/IP		•	•	•	•		
HTTP/HTTPs Webserver		•	•	•	٠		
SMTP Email		•	•	•	•		
SNMP V3		•	•	•	•		
MQTT		•	•	•			
EtherNet/IP, RSTP, IPv6		•	•	•			
HTTP/HTTPs Push		•	•	•	•		
FTP Post		•	•	•	•		
sFTP Server		•	•	•	•		
Datalogging	16MB	8GB	8GB	8GB	4GB		
BACnet-IP		•	•	•			
PROFIBUS						٠	
WiFi		•	•				
RJ45 Ports		1	2	2	1		
Fiber Optics LC		•					

# ACUVIM II + AXM-WEB2 • AXM-WEB2-D • AXM-WEB2 FC

WiFi + Dual Ethernet

**Dual Ethernet** 

WiFi + Ethernet + Fiber Optics LC

ACCUENERGY.COM/AXM-WEB2

ACCUENERGY.COM/AXM-WEB2-D

ACCUENERGY.COM/AXM-WEB2-FOLC



#### **Key Specifications**

- Graphical display for easy analysis
- Metered data is backed up in 8GB non-volatile memory
- RJ45 daisy chain using dual Ethernet ports
- Maintain high availability with RSTP
- Industry-leading 40ms response rates via Modbus TCP/IP

#### WEB2 Interface Provides Remote Access

Take full control of the Acuvim II power meter through the web browser interface. Access complete energy from anywhere in the world. Manage and update meter configuration settings including 16 over/under alarm settings. Two-tier user control settings ensure reliable access without compromising meter security.

#### IEC 61850 Certification

The Acuvim IIW power meter with AXM-WEB2 Series communication module has been 3rd party certified to meet stringent IEC 61850 (2nd ed.) requirements for seamless deployment in substations and other critical facilities.





Access anywhere via

Access anywhere via SerialNumber.accuenergy.io

AXM-WFR2

AXM-WEB2 FOLC

- Custom Modbus register list groups key parameters
- Compliant with industry-standard security protocols
- IPV6 & IPV4 dual IP network support
- Over-the-air (OTA) firmware updates
- Easy integration with Allen Bradley & Rockwell systems

#### **Flexible Communication Support**

Designed to securely meet a wide range of industrial communication requirements, each module is equipped with both Ethernet and WiFi channels. Additionally, the AXM-WEB2 FOLC includes a fiber optic LC port for fast, reliable signal transmission. Communication ports can be utilized simultaneously across different networks or data acquisition systems.

#### Data Logging & Event Storage

The AXM-WEB2 Series module expands the meter's memory to an industry-leading 8GB with 1-second interval datalogging. Most metering parameters can be recorded for later download or analysis.



Daisy-chain support via Ethernet ports,

ACCUENERGY | 11



# ACUVIM L

**Uphilumeter Power Unit** 

cvar

**kVA** 

kWh

V/A

#### Standard Multifunction Power & Energy Meter Series

The Acuvim L is a cost-effective power meter that offers performance and value for standard metering solutions. Designed to be easily integrated in panels, as a DIN rail transducer, or as a pre-wired panel. Ideal for a variety of different industrial & commercial applications.

#### ACCUENERGY.COM/ACUVIM-L



Modbus

#### **Key Specifications**

• Revenue grade: ANSI C12.20 class 0.2 & IEC 62053-22 class 0.2s

548

H

PRODUCT UPDATE

• 4th CT input – measure neutral current

Acuvim-L

- Dual Ethernet ports with both RSTP bridge daisy-chain mode and separately configurable network
- Remote channel mapping and four channel multi-circuit metering
- Dual source meter to monitor energy usage from separate energy sources

- Data Logging available in 16MB onboard and 8GB with WEB2 module
- Designed with industry leading cybersecurity
- Available compatibility with multiple CT output options including 5A, RCT (Rogowski), or 333mV
- Modbus-RTU & BACnet MS/ TP ready. Optional modules add support for multiple industrial protocols & interfaces such as Modbus- TCP/IP, BACnet-IP, and WiFi

\* Selected models only.









## Modbus, BACnet with PROFIBUS Option

The Acuvim L meters are equipped with Modbus-RTU & BACnet-MS/TP protocol, allowing for interoperability between devices that utilize serial communication.

Through an expansion module, add optional PROFIBUS protocol ideal for factory automation systems.

#### Data Logging

Acuvim L meters offer three, assignable historical logs and a real time clock to record metering parameters with accurate timestamping. Add the AXM-WEB2 module to expand the memory to 8GB with an adjustable log size.

#### Time-of-Use (TOU)

Users can assign up to four tariffs (sharp, peak, valley, & normal) to different time periods within a day, as well 12 seasons, and 14 schedules. The Acuvim L meter will calculate and accumulate energy to different tariffs according to the meter's internal clock and TOU settings.

#### AXM-DIN Rail Mounting Adapter

The AXM-DIN Rail Adapter is the easy solution for panel-mount Acuvim L series meters on

either horizontal or vertical DIN rail.



#### Alarms

Limits can be set for up to 16 indicated parameters with a specified time interval. Parameters that are over or under setting limit and persist longer than the specified time interval will be recorded and trigger the Alarm DO. Choose from 80 available parameters.

#### IP66/NEMA4X Adapter Protection Cover

The protection cover is designed to defend against dust, water, or other contaminants. It increases the IP environmental

rating of a meter's display.



#### **Communication Module Comparison**

Meter Only	AXM	AXM	AXM		
Cilly	WEB2 FOLC	WEB2	WEB2-D	AXM PROFI	AXM RS485
٠					٠
•					
	•	•	٠		
	•	•	٠		
	•	•	٠		
	•	•	•		
	•	•	٠		
	•	•	٠		
	•	•	٠		
	•	•	٠		
	•	•	•		
	•	•	٠		
	•	•	٠		
	•	•	٠		
	•	•	٠		
16MB	8GB	8GB	8GB		
	•	•	٠		
				•	
	•	•			
	1	2	2		
	•				
	• 16MB		<ul> <li>•</li> <li>•</li></ul>	<ul> <li> <ul> <li> <ul> <li> <ul> <li> <ul></ul></li></ul></li></ul></li></ul></li></ul>	<ul> <li>•</li> <li>•&lt;</li></ul>

#### Acuvim L Series Models

	CL	EL
Metering	Voltage (V), Current (Amp), Power (kW)	Voltage (V), Current (Amp), Power (kW)
Energy & Demand	•	•
Time-of-use	٠	•
Accuracy	0.5%	0.2%
Power Quality Individual Harmonics	2 <sup>nd</sup> to 31 <sup>st</sup>	2 <sup>nd</sup> to 63 <sup>rd</sup>





# ACUREV 1310

## 

#### **DIN-Rail Digital Panel Meter**

The AcuRev 1310 combines high performance with easy integration to provide a cost-effective power and energy monitoring solution for three-phase AC systems. It's robust design features a built-in LCD, Modbus-RTU communications, and 4 current input channels.

#### ACCUENERGY.COM/ACUREV-1310





🕖 🔹 Modbus

#### **Key Specifications**

- Utility revenue grade accuracy IEC 62053-22 0.5s Class / ANSI C12.20 0.5 Class
- Measurement Canada approved
- Compatible with a variety of CT options: 5A/1A, 333mV, Flexible Rogowski Coil, and 80/100/200mA
- 4 Channel current input including neutral current measurement
- Residual current measurement available

- 10-690Vac direct voltage input; fits all voltage rating system with one model
- Integrated RS485 port with Modbus-RTU and BACnet MS/TP for communication with most systems.
- Standard DIN-rail mount for ease-of-installation
- Compatible with both 50Hz and 60Hz systems
- Built-in energy pulse output and alarm output
- Optional relay output for alarm and remote control



#### 4 Channel CT Input

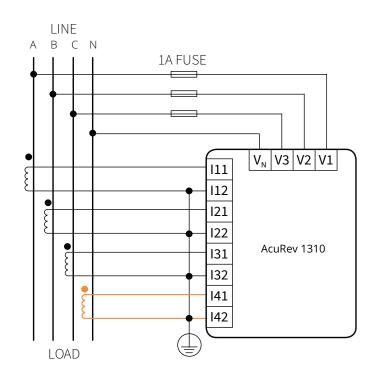
Accurately measure neutral current with 4th CT channel to provide residual current measurement.

#### **Auto Phase-Check**

Designed to automatically check most common wiring mistakes including CT orientation, as well as voltage and current phase alignment.

#### Supports All Electrical Systems

Monitor a variety of electrical systems including threephase three wire (3P3W), three-phase four-wire (3P4W), single-phase three-wire (1P3W two element), single-phase two-wire (1P2W one element), and more.



#### NEMA 4X Rated Wall Mount Enclosure For AcuRev 1310 Series

The AcuRev 1310 enclosure (AcuRev 1310-ENC) offers a mounting option for AcuRev1310 Series energy meters that helps protect from tampering and the elements.



#### AcuRev 1310 Series Models

	1311	1312	1313	1314	
Application	DIN-Rail mounted realtime energy monitoring	DIN-Rail mounted real- time power and energy monitoring	DIN-Rail mounted real-time bi-directional power and energy monitoring	DIN-Rail mounted real- time multifunction monitoring with neutral current measurement and calculated residual current	
Metering	Energy, Voltage, Current, Active Power	Energy, Time-of-Use, Power Demand, Current Demand, Voltage, Current, Power, Power Factor, Frequency	Energy, Time-of-Use, Power Demand, Current Demand, Voltage, Current, Power, Power Factor, Frequency	Energy, Time-of-Use, Power Demand, Current Demand, Voltage, Current, Power, Power Factor, Frequency	
Current Input	5A/1A: Field-Configurable 5A or 1A Current Transformer Input 333mV: 333mV Current Transformer Input RCT: Flexible Rogowski Coil Current Transformer Input 80/100/200mA: Field Configurable 80mA, 100mA or 200mA Current Transformer Input				
I/O Options		One relay output for ala	arm and remote control		

# EV300

#### ACCUENERGY

8967\*\*

5000

#### **Panel Meter Series**

The EV300 energy meter is equipped with key essential metering parameters for an affordable, reliable solution. Combining revenue grade accuracy and custom I/O options, this panel-mountable meter's compact form-factor is ideal for a wide range of applications.

#### ACCUENERGY.COM/EV300

CE



#### **Key Specifications**

Bi-directional energy metering

EV390

- Utility revenue grade accuracy
- Field configurable 5A/1A CT input
- Compatible with both 50Hz and 60Hz systems
- RS485 port built-in with Modbus-RTU
- Standard panel mount 96mm DIN-direct retrofit

- Switch status monitoring and controlling
- Energy pulse output
- 4-20mA analog transducer output
- Over/Under limit alarm-triggered relay output
- Lowest cost in the same class guaranteed









#### Modbus-RTU via RS485

EV300 series meters are Modbus-RTU protocol ready, allowing meter data interoperability between devices that utilizes serial communication.

#### Frequency

Automatic frequency detection adapts to 50Hz or 60Hz systems without compromising accuracy, simplifying the design and eliminating international OEM frequency issues.

#### Voltage

Supports any voltage system with a rating between 10V to 230V/400V. It also allows potential transformer ratio configuration.

#### **Digital Output**

Pulse output monitors all utilities including water, gas, & electricity provides energy data to any data acquisition server without communication.

#### Analog Output

Current

transformer.

Industry standard signal 4-20mA analog output is used for automation and process control and can be directly used with any programmable logic controller (PLC).

Field-configurable 5A and 1A CT

input to suit any industrial current

#### **EV300 Series Models**

	EV387	EV390
Voltage (V)	٠	•
Current (Amp)	•	•
Power (kW)		•
Reactive Power (kVar)		•
Apparent Power (kVA)		•
Power Factor (PF)		•
Frequency (Hz)		•
Energy (Import/Export/Total/Net)		•
Reactive Energy (Import/Export/Total/Net)	•	•
Modbus-RTU via RS485	•	•
LCD Display	•	•

#### EV300 Series Input/Output Selection Table

	EO	E1	E2	E3	E4
Digital Input	2	6	6	6	6
Digital Output (Pulse)	-	-	2	2	-
Analog Output (4-20mA)	-	-	-	2	2
Relay Output	-	2	-	-	2
Auxiliary Power 24Vdc	-	1	1	-	-



# AcuPanel 9100

ACCUEVEDO



Cut down on costly installation & avoid wiring error with these pre-configured and pre-installed panel metering systems. The AcuPanel series also feature some of Accuenergy's most powerful meters including the Acuvim II, Acuvim L, and AcuRev 2100 series, secured in a either a NEMA 4 or NEMA 4X enclosure for versatile installation options.

#### ACCUENERGY.COM/ACUPANEL



#### **Key Specifications**

- Factory pre-wired for fast, reliable installation
- Factory pre-configuration eliminates meter programming on-site

ACCUENE

- Required accessory components are all pre-installed
- Self-powered panel does not require separate power supply
- Durable enclosures provide high tolerance for external force with well protection
- Housed in either a NEMA 4 rated industrial steel enclosure, or NEMA 4X rated polycarbonate enclosure for either indoor or outdoor implementation
- Available metering options include the Acuvim II Series, Acuvim L Series, AcuDC 240, and AcuRev 2100.













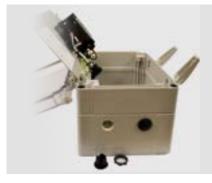
#### **Clean Factory Wiring**

Factory installed connections and components have been diligently tested to be reliable and dependable for an error-free integration into your system.



#### **Components Included**

Pre-assembled shorting blocks for current transformers and fused terminal blocks for voltage connections are colour coded and clearly labeled to allow for time-saving maintenance and identification.



#### **Pre-Cut Enclosure**

Two pluggable, pre-cut holes allow wires to be securely fed through the enclosure without any added modifications to the enclosure. Simple grounding wire are firmly installed inside.

#### NEMA 4 Enclosure

Made from durable steel, this indoor rated enclosure provides a degree of protection against dirt, dust, and other solid objects.

#### NEMA 4X Enclosure

Rated for indoor and outdoor use, this NEMA 4X enclosure provides the ultimate shield against hostile environmental hazards including adverse weather & corrosion.

#### Standard pre-wired enclosure includes:

- Terminal blocks for current
  transformer input
- Shorting block for current transformer
- Terminals blocks for voltage input
- 3 Industrial-grade fuses



#### AcuPanel Series Models

	AcuPanel 9104	AcuPanel 9104X	AcuPanel 9104X-DC	AcuPanel 9106X
Compatible Meters	Acuvim II, Acuvim L	Acuvim II, Acuvim L	AcuDC 240	AcuRev 2100
Application	Indoor installations that re- quire rugged protection, but not weather resistance	Indoor or outdoor installat	ions that require exceptional env weather resistance	ironmental protection and
NEMA Rating	NEMA 4	NEMA 4X	NEMA 4X	NEMA 4X
Material	Steel	Polycarbonate	Polycarbonate	Polycarbonate
Anti-Corosive		•	•	•
Dust-Proof	•	•	•	•
Suitable for Indoor Use	•	•	•	•
Suitable for Outdoor Use		•	٠	•
Pre-Wired	٠	٠	٠	•
Pre-Configured	٠	•	•	•

# AcuRev 2100



ACCUENERGY.COM/ACUREV-2100

#### Multi-Circuit Submeter with SnapOn CT Technology

Monitor Multiple Circuits with SnapOn CT Technology. The AcuRev 2100 is the nextgeneration multi-circuit power and energy meter designed to measure 18 single-phase circuits using SnapOn CT technology for quick and easy installations in high-density, multi-point applications. Reliably monitor real-time energy consumption and power quality in commercial, residential, and industrial multi-tenant energy management systems.







#### Key Specifications

- 18 single-phase or 6 (or 9) polyphase circuits
- Measurement Canada approved revenue-grade (ANSI C12.2 Class 0.5 & IEC 62053-22 Class 0.5s)
- Advanced power quality analysis
- Built-in WEB2 module meets all communication
  protocol needs
- Modbus, BACnet, SMTP, HTTP/HTTPS Post, FTP & NTP, SFTP, SNMPv3, and RSTP
- WiFi communication channel, with IPv6
- Remote meter access via SerialNumber.accuenergy.io

- Dual Ethernet ports for unparalleled communication and daisy-chain connection
- Secure and encrypted HTTPS web server for meter reading and configuration
- 8GB onboard memory for data logging and historical trend analysis
- Programming and terminal tamper-proof seal
- 18 Digital Inputs for water and gas metering
- 6 Digital Outputs, 2 Relay Outputs
- Optional cloud-based data storage with AcuCloud









#### SnapOn CT Technology

Accuenergy has designed an innovative CT technology that allows any 80mA, 100mA, or 333mV current transformer to plug into the AcuRev 2100 submeter without the use of traditional terminal blocks or error prone wiring configuration. Simply attach the SnapOn connector to a CT and plug into the meter for a fast, convenient installation experience. 20 SnapOn CT connectors are included with the meter.

#### Measurement Canada Approved

The AcuRev 2100 is approved to meet stringent Measurement Canada specifications and ANSI C12.20 Class 0.5 and IEC 62053-22 Class 0.5s accuracy requirements. Terminal sealing provides added security, prevents tampering with metering settings, and safeguards data integrity.

#### Over/Under Limit Alarms

Ten limit alarms can be assigned to various conditions. The alarm function effectively alerts and protects systems by sending out notifications and automatically shutting down equipment. Alarms can be configured for peak demand, current, or power quality thresholds. Use the web interface to view active and historical alarms, as well as configure new alarms.

#### WEB2

The built-in WEB2 module provides remote access to real-time energy data monitoring. View details on power & energy, power quality, and other critical measurements. A wide range of communication methods are supported including dual Ethernet & WiFi. Additionally, it provides compatibility with an array of industrial protocols including Modbus TCP/IP, BACnet IP, MQTT, SMTP, HTTP/ HTTPs Post, and more.

#### IP66/67 Rated Wall Mount Enclosure

The AcuRev 2100 enclosure *(ENC-12127PIP67)* offers a mounting option for AcuRev 2100 Series energy meters that helps protect from tampering and the elements.



#### AcuRev 2100 Series Models

	AcuRev 2110
Application	Multi-Tenant & High-Density Submetering
Number of Single Phase Circuits Monitored	18
Number of Three Phase Circuits Monitored	6
CT Input	80mA, 100mA, 333mV, Rogowski Coil
Communication	RS485, Dual RJ45, WiFi

#### **Power Quality Analysis**

Power quality analysis is essential in industrial & commercial applications where protecting sensitive electronic equipment is critical. AcuRev 2100 series meters provide power quality parameters such as voltage and current THD, individual voltage and current harmonics up to the 31<sup>st</sup> order, voltage crest factor, current K factor, and voltage and current unbalance. These parameters are monitored in real-time and logged in memory.

#### Data Logging

Real-time energy metering, power quality analysis, and I/O data can be stored in the onboard, non-volatile memory. Logged information can be retrieved via serial connection or remotely by Ethernet in Excel, CSV, or text format for historical trending and system analysis. The ample internal memory provides classleading storage capacity suitable for any advanced application. For instance, it will take over 100 years to fill the memory if the meter is configured to monitor 100 energy parameters at 5-minute intervals.





# AcuDC 240

#### DC Energy Meter

The AcuDC 240 series of DC power and energy meters are designed for monitoring DC consumption and generation in applications like renewable energy. The AcuDC 240 is a effective metering device able to read voltage, current, power, energy and ampere-hour.

#### ACCUENERGY.COM/ACUDC-240

c∰us C€

A ... DC 240

Modbus

#### **Key Specifications**

- Built-in three-line LCD
- Modbus-RTU communications.
- Monitor and control power switches

ACCUEVERG)

- Standard 72x72mm size allows for drawer-type panel installation
- 0.2% accuracy on voltage and current; 0.5% on power and energy parameters.

- Accessible with SCADA, PLC systems
- Onboard datalogging provides historical logging of all DC metering parameters for analysis
- Built-in Hall effect sensor power supply (+/-15Vdc) for ease-of-measuring
- Optional digital input and output, analog and relay output I/O expansions









# Power Meter Solutions

#### **Solar Arrays**

Directly monitor the power and energy produced from the solar array, before the inverter, for the most accurate analysis of solar production.

#### Wind Turbines

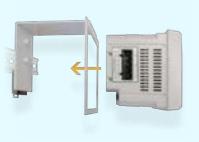
Meter the production and effectiveness of wind generated energy before its sent into the grid and integrate with existing systems through Modbus-RTU.

#### Vehicle Charging

Audit and observe the electrical consumption of charging stations or individual EV motors from a charge station in real time, as an accumulated total, and with historical data logging.

#### AcuDC 240 Series Din Rail Mounting Adapter

AcuDC 240 Series DIN Rail adapter (DC-DIN) provides an easy installation for all panel-mounted AcuDC 240 meter models and I/O options that require a DIN rail solution.



#### Communications Modules

These plug-in expansion modules are available for the AcuDC line of DC power and energy meters.



#### AcuDC 240 Series Models

Function	AcuDC 243
Application	All DC Monitoring & Metering Applications
Metering Parameters	Voltage, Current, Power, Energy, Ampere-Hour
I/O Modules Available	•
Data Logging	Optional
Communication Protocol	Modbus-RTU

#### AcuDC 240X Expansion Modules

	Digital Input (DI)	Analog Output (AO)	Analog Input (Al)	Relay Output (RO)	Digital Output (DO)	Hall Effect Sensor Power Supply
X1	2	2				
X2	2 (4-20mA / 0-20mA)	2 (0~5V / 1~5V)				
X3	2			2		
X4	2				2	
X5	2					+/-15Vdc
X6			2 (4-20mA / 0-20mA)			+/-15Vdc
Х7			2 (0-5V / 1-5V)			+/-15Vdc

# AcuCloud



AcuCloud Software is a cloud-based energy data management platform that provides facilities professionals access to real-time and historical data from power and energy meters. Users can view, download, and share energy data as well as perform sophisticated analysis and report creation.

#### ACCUENERGY.COM/ACUCLOUD

#### **Key Features**

• Feature-rich set of tools for monitoring real time energy, performing M&V, interpreting energy trends, and analysing a complete energy portfolio.

ACUCLOUD

CLOUD BASED METERING

- Efficient delivery of complex data in an intuitive, user-friendly format.
- Seamless integration with Accuenergy web-enabled devices or via AcuLink 810 as a gateway for serial and third party devices.

#### PRODUCT COMPATIBILITY

ALL ACCUENERGY METERS

#### Data Storage + History

Energy managers have access to energy data in unparalleled detail. AcuCloud stores the history for important energy parameters including per phase and system voltage, current, power, energy, power factor, demand, and pulse data in 5-minute intervals.

#### Data Sharing + Integration

Successful energy management depends on the stable integration of energy data across platforms. AcuCloud makes it easy to forward all metered data to a 3rd party software system for analysis, reporting, billing, efficiency studies, or measurement & verification projects. Multiple data formats are supported.

#### **Flexible Reporting**

Collaborate with colleagues on critical facility decisions: AcuCloud features a powerful sharing tool which allows data to be downloaded & emailed for insightful project coordination. Easily send all reports or choose from a range of valuable, pre-configured dashboards that highlight key energy management metrics.



#### **Convenient Alerts**

When energy usage reaches a threshold or if a meter goes offline, a timely alert can be critical to ongoing facility operations. AcuCloud offers configurable email alerts that are automatically triggered.

#### **Powerful Data Analysis**

Metered data has no value without additional analysis from sophisticated software. Simple, yet powerful data analytics tools provide actionable insight. Monitor trends, perform analysis, manage energy projects, and more.

#### **APPLICATIONS:**

#### **Tenant Kilowatt-Hour Profiles**

- Provide each tenant with account access to view real-time energy & consumption trends
- Tenant profiles raise awareness of energy usage and can be compared against building averages
- Analyze the energy usage for multiple tenant groups

#### **Tenant Billing Management**

- Manage tenant bills individually
- Adapt to various billing structures
- Generate bills from multiple submeters for internal rebilling or cost allocation
- Use custom rate structures and formulas to create bills that fit any circumstance

#### **ACUCLOUD INTEGRATION EXTENSIONS:**

#### **Tariff Analytics**

Quickly assess the anticipated savings when negotiating new energy contracts with utilities. Enter a proposed rate and the tariff analysis tool calculates payments based on the past energy consumption.

#### **Trending Analytics**

Energy profiles make it easy to analyze usage patterns and identify irregularities.

#### **Measurement and Verification**

An advanced alternative to tedious spreadsheets: track energy conservation, calculate average consumption, and verify outcomes after upgrades.

#### Dashboard

Use configurable widgets to monitor measurements, metrics, and savings.



# AcuLink 810



# Data Acquisition Server & Gateway

Accuenergy's AcuLink 810 is a comprehensive DAQ BACnet gateway and server. Devices and metering data can be managed and accessed through a central hub before distributed to an energy management system. Energy data is available to be stored locally or transferred via an IP-based network to a remote server or controller.

#### ACCUENERGY.COM/ACULINK-810

Modbus BACnet M.Bus MOTT

#### **Key Specifications**

- Track energy usage, peak demand and other energy parameters
- BACnet-MS/TP data acquisition and logging with 8GB on-board memory
- BACnet gateway (Converts Modbus-RTU and BACnet-MS/TP to BACnet IP)
- Remote access to monitor and configure devices
- RSTP high availability to reduce network downtime

- Poll data from all RTU devices via Modbus-TCP/IP
- Ethernet Gateway for Modbus RS485 and Digital Output Devices
- Remote web-server access for real-time data and easy configurations
- Dual Ethernet RJ45 port and WiFi communication channels
- SSL and TLS1.2 compliant enhanced cybersecurity protection
- Over/Under alarm monitoring for connected devices







# **Communications & Software Solutions**

#### **BACnet Gateway**

AcuLink 810 can read Modbus, BACnet, and MBus devices offering integrators the option to retrofit existing systems saving time and costs. Support for multiple protocols facilitates the intercommunication of devices by allowing such devices to interoperate on a BACnet IP network.

Water & Gas Meters

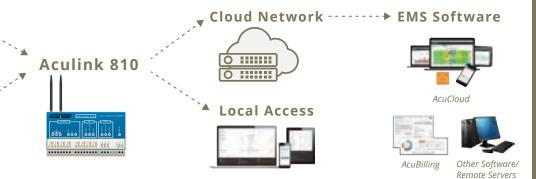
**Power/ Energy Meters** 

#### Data Logging

Critical data, such as energy and power quality measurements, is stored in 8GB non-volatile memory with a capacity for over three years of energy data collected at 15-minute intervals. Logged information is easily retrieved from a web browser or posted to a remote sever via HTTP/HTTPs, FTP in CSV or JSON format.

#### Embedded Web Server

Access and monitor all connected devices anytime, anywhere using a web browser. A friendly UI allows users to easily view of all collected devices with detailed real-time metering summary, setup, alarms, and configurable upload channels.



#### loT Connectivity

Support for MQTT protocol allows subscribers to instantly receive up-to-date device data to their mobile phone or other Internet of Things devices. Messages can be configured to send at intervals for specific connected devices.

#### Poll Downstream Data

Allow a Modbus master on a remote network to poll downstream metering data directly from all RTU devices that are connected to the DAQ BACnet gateway. The AcuLink 810 supports Modbus polling for eight pulse counters used for water, heat, gas and electricity metering.

#### Daisy Chain 32 Devices

Users can daisy-chain multiple devices using the RSTP protocol. This can cut down the amount of network switches required in different applications and allows the use of 1 network switch/ router to be used with multiple devices. Multiple Modbus- RTU devices can be connected via USB port.

#### AcuLink 810 Gateway Conversion

		AcuLink 810-X	AcuLink 810-900	AcuLink 810-868	
Gateway Outgoing Protocols		Modbus-RTU, Modbus-TCP/IP, BA	Cnet-MS/TP, BACnet-IP, SunSpec, M	bus, Pulse Counter, Virtual Meter	
		Modbus-TCP/IF	, BACnet-IP, SNMP, HTTP, HTTPs, FI	FP, sFTP, MQTT	
Digital Input		8 Pulse Counters			
Onboard Memory		8GB			
Interval Logging		1 to 1,440 Minutes			
AcuMesh 900Mz		•			
AcuMesh 868Mz				٠	

ACCUENERGY | 27

# AcuMesh

#### Wireless RS485 Transceiver

The AcuMesh network solution is designed to connect RS485-enabled devices including meters, sensors, gateways, PLCs, and more into a seamless wireless network. It offers a cost-effective, non-intrusive installation that eliminates the need for additional communications wiring.

#### ACCUENERGY.COM/ACUMESH

Key Specifications

- Devices are connected automatically on power up without configuration or software
- Compatible with Modbus-RTU protocol
- Utilizes either the 900MHz or 868MHz frequency band available in most countries.
- Highly secure communication with 128-bit Advanced Encryption Standard (AES)

Field-upgradable firmware

KòHS

- Complex networks are easily configured using free software
- Communicate wirelessly between meters and other RS485 devices running any protocol within a building or campus
- Long-range communication: 1000 ft (305m) indoor / 4 Miles (6.5km) outdoor in a single hop

#### AcuMesh Wireless RS485 Network

The AcuMesh wireless RS485 network solution eliminates the need for physical RS485 communication wiring. Devices directly connect to an AcuMesh transceiver and the job is done. The AcuMesh transceiver transmits data and commands wirelessly within the network.



# AcuCT Flex

#### **Rogowski Coils**

Designed for unmatched ease-of-installation, this specialized line of flexible AC current transformers is ideal for deployment in power metering, power quality, and general use applications where space is limited.

#### ACCUENERGY.COM/ACUCT-FLEX

A broad frequency range makes it an excellent choice

Directly compatible with Accuenergy RCT input devices -

no external power supply or integrator needed

for monitoring harmonics and power quality



#### **Key Specifications**

- High accuracy for demanding applications
- Wide current input range 5A 50,000A AC
- Four coil lengths available: 16", 24", 36", or 47"

#### **4 Standard Lengths**

We offer four coil lengths: 16", 24", 36", and 47". Custom lengths available upon request.

#### Flexible Style CT

Rope-like coil allows it to fit into limited spaces where regular, ridged CTs cannot be used.

#### Wide Current Sensing

Measure current from 5A to 50,000A on a standard coil. *Higher current range available upon request.* 

#### Wide Frequency Response Range

Standard frequency response range 10 Hz - 20kHz. *Higher frequency range available upon request.* 

### High Accuracy & Linearity

Accuracy is 0.5% across the entire range of measurement.

#### Standard & Custom Output

Multiple output ratio options available, including: 100mV/1000A, 40mV/1000A, 25mV/1000A, 10mV/1000A.

#### **AcuCT Flex Series Options**

	RCT16	RCT24	RCT36	RCT47	
Input Range	5A - 50000A	5A - 50000A	5A - 50000A	5A - 50000A	
Output Option		Output to Specified RCT input			
Window Size	4.17" (106mm)	7.01" (178mm)	10.67" (271mm)	14.53" (369mm)	
Length	15.75" (400mm)	23.62" (600mm)	35.43" (900mm)	47.24" (1200mm)	
Accuracy	0.5% Combined with Acuvim II Series at Any Point				



#### **Rogowski Integrator**

The integrators are a versatile, plug-and-play solution that allows Rogowski coils to be field-configurable for multiple CT input ratios. Single-phase and three-phase options are available.

#### ACCUENERGY.COM/ACUCT-RIK



#### **Key Specifications**

- CT ratios are field-configurable for on-site flexibility.
- Output types include 0-5A, 0-1A, 0-333mV, 4-20mA, 0-20mA, 0-5V, 0-10V
- RIK 1AR: 0-A Output Relay Class (5P20).

- Individual CT ratios can be configured for each channel.
- Works in any single-phase or three-phase applications.
- Works in both 50Hz and 60Hz systems.
- Four coil lengths available (sold separately).

#### **RIK Series Options**

	RIK 1AR*	RIK 5A	RIK mV*	RIK mA*	RIK V*
Current Measurement Range	0.25A - 100kA		2.5A	- 60,000A	
Sensing Range	50A, 200A, 500A, 2000A and 5000A (User Selectable)	500A, 1000A, 2500	)A, 5000A, 10000A,	. 25000A and 50000A (Field	d Configurable)
Output Rated Options	0-1A	0 – 6A RMS (0 – 5A RMS Nominal)	0-333mVac	4-20mAdc, 0-20mAdc	0-5Vdc, 0-10Vdc
Accuracy	% at 1A, 5% at 20A	1.0%	1.0%	1.0%	1.0%
Rogowski Coil Sizes			16", 24", 36", 47"		
Frequency	50Hz and 60Hz		45Hz	z to 65Hz	
Single-Phase	•	•	•	•	•
Three-Phase		•	•	•	•

Current Transformers 🛛 💥

\*Rogowski coil and power supply sold separately.

## AcuCT







#### **Revenue-Grade Split-Core CT**

High-accuracy split core current transformers with a unique press-to-open hinged design and current input range from 5A to 5000A AC. AcuCT R also offers revenue grade accuracy for billing applications.

#### ACCUENERGY.COM/ACUCT-R

#### **AcuCT R Series Options** AcuCT-075R AcuCT-100R AcuCT-200R AcuCT-4161R AcuCT-5170R AcuCT-125R AcuCT-3135R 5A - 250A 5A - 1000A 5A - 1000A 5A - 5000A 5A - 5000A Input Range 1A - 150A 5A - 400A 1200A, 1600A, 600A, 800A, 50A, 100A, 100A, 200A, 100A, 200A, 400A, 600A, 2000A, 2500A, 2000A, 3000A, Typical Input 1000A, 1200A, 300A, 400A 800A, 1000A 3000A, 4000A, 4000A, 5000A 150A 250A 1500A 5000A 1A, 333mV, 1A, 333mV, 1A, 333mV, 5A, 1A, 333mV, 5A, 1A, 333mV, 5A, 1A, 333mV, Output 333mV, 80mA, 80mA, 100mA, 80mA, 100mA, 80mA, 100mA, 80mA, 100mA, 80mA, 100mA, 80mA, 100mA, 100mA, 200mA Option 200mA 200mA 200mA 200mA 200mA Window 0.75" x 0.75" 1" x 1" 1.25" x 1.25" 2" x 2" 3.1" x 3.5" 4.1" x 6.1" Size (19.5 x 19.5 mm) (25 x 25 mm) (32 x 32 mm) (51 x 51 mm) (80 x 90 mm) (105 x 155 mm) (130 x 180 mm) Exterior 2.3" x 2.3" x 0.9" 2.6" x 2.6" x 0.9" 3.2" x 3.2" x 0.9" 4.4" x 4.4" x 1.25" 5.7" x 6.1" x 1.25" 7.3" x 9.3" x 1.8" 8.3" x 10.2" x 1.8"

(82 x 82 x 22 mm)

RŏHS

Dimensions Accuracy

## AcuCT mV

(58 x 58 x 22 mm)

(65 x 65 x 22 mm)

(F

#### IEC 60044-1 0.5s class

(111 x 111 x 32 mm)

#### 333mV Split-Core CT

Split-core CT with 333mV output is designed for retrofit projects used in general panel metering applications. It can be pulled apart and securely pushed back together to allow installation without disrupting the existing system.

ACCUENERGY.COM/ACUCT-MV

(144 x 154 x 32 mm)

(185 x 235 x 45 mm)



200mA

5.1" x 7"

(210 x 260 x 45 mm)

#### **AcuCT mV Series Options**

	AcuCT-075	AcuCT-125	AcuCT-200	AcuCT-3050
Input Range	10A - 200A	30A - 600A	60A - 1500A	40A - 5000A
Typical Input	100A, 200A	300A, 400A, 600A	600A, 800A, 1000A, 1200A, 1500A	400A, 600A, 1000A, 1500A, 2000A, 3000A, 5000A
Rated Option		33	3mV	
Window Size	0.75" x 0.75" (19.1 x 19.1 mm)	1.25" x 1.25" (31.8 x 31.8 mm)	2" × 2" (50.8 × 50.8 mm)	3" x 5" (76.2 x 127 mm)
Exterior Dimensions	2" x 2.098" x 0.669" (50.8 x 53.3 x 17 mm)	3.248" x 3.35" x 1.025" (82.5 x 85.1 x 26 mm)	4.764" x 5" x 1.81" (121 x 127 x 30 mm)	5.748" x 7.5" x 1.402" (146 x 190.5 x 35.6 mm)
Accuracy	0.5%	0.5%	0.5%	0.5%

ACCUENERGY 31

# AcuCT 5A





#### 5A Split-Core CT

Split-core CT with 5A output is ideal for a wide range of industrial metering solutions where accuracy is critical. Designed with specialized mounting clips and tension screws for optimal installation.

#### ACCUENERGY.COM/ACUCT-5A

#### **AcuCT 5A Series Options**

	AcuCT-0812	AcuCT-2031	AcuCT-3147	AcuCT-3163
Input Range	5A - 400A	5A - 1000A	5A - 1600A	5A - 5000A
Typical Input	100A, 150A, 200A, 250A, 300A, 400A	400A, 600A, 800A, 1000A	1000A, 1200A, 1600A	2000A, 2500A, 3000A, 4000A, 5000A
Output Option	5A, 1A	5A, 1A	5A, 1A	5A, 1A
Window Size	0.83" x 1.22" (21 x 31 mm)	1.97" x 3.15" (50 x 80 mm)	3.15" x 4.72" (80 x 120 mm)	3.15" x 6.3" (80 x 160 mm)
Exterior Dimensions	3.5" x 4.13" x 1.57" (89 x 105 x 40 mm)	3.5" x 4.13" x 1.57" (89 x 105 x 40 mm)	5.67" x 7.28" x 1.97" (144 x 185 x 50 mm)	6.93" x 9.72" x 2.76" (176 x 247 x 70 mm)
Accuracy	0.5%	0.5%	0.5%	0.5%



# AcuCT Hinged

c **FL**us

CE

RŏHS

#### **Compact Split-Core CT**

Ultra small hinged split-core CT can be used on branch circuits within an electrical panel with spatial contraints. Simple to install and quick to deploy in retrofit applications with a 333mV rated output.

#### ACCUENERGY.COM/ACUCT-HINGED

#### AcuCT mV Series Options

	AcuCT-H040	AcuCT-H063	AcuCT-H100	AcuCT-H138
Input Range	5A - 75A	5A - 150A	5A - 250A	10A - 630A
Typical Input	20A, 30A, 40A, 50A, 60A	50A, 100A, 150A	100A, 120A, 200A, 250A	200A, 400A, 600A
Rated Option		33	3mV	
Window Size	0.4" (10.2 mm)	0.63" (16 mm)	1" (25.4 mm)	1.38" (35 mm)
Exterior Dimensions	1.16" x 1.64" x 1.04" (29.4 x 41.7 x 26.4 mm)	1.42" x 2.09" x 1.2" (36 x 53 x 30.5 mm)	2" x 2.76" x 1.52" (50.8 x 70.1 x 38.6 mm)	2.56" x 3.27" x 1.57" (65 x 83 x 40 mm)
Accuracy		0	.5%	

## AcuCT S113



#### Solid-Core Current Transformer

Accuenergy solid core CTs are compact, cost-efficient, and provide high accuracy measurements in a rugged form factor. Designed specifically for integration into products that require accurate 1% signal transformation, the solid core design makes them especially resilient in harsh, industrial environments.

#### ACCUENERGY.COM/ACUCT-S113

#### **AcuCT S113 Solid-Core Series Options**

	AcuCT S113-200	AcuCT S113-300	AcuCT S113-400
Primary Input	200A	300A	400A
Rated Output	1A, 5A, 333mV	1A, 5A, 333mV	1A, 5A, 333mV
Rated Voltage	<1,000V	<1,000V	<1,000V
Burden	≤3.75VA	≤3.75VA	≤3.75VA
Rated Frequency	50Hz - 60Hz	50Hz - 60Hz	50Hz - 60Hz
Exterior Dimension	2.38" × 2.68" × 0.96" (60.5 × 68.0 × 24.5 mm)	2.38" × 2.68" × 0.96" (60.5 × 68.0 × 24.5 mm)	2.38" x 2.68" x 0.96" (60.5 x 68.0 x 24.5 mm)

# AcuCT S77





RŏHS

#### **Revenue-Grade Solid-Core CT**

Solid-core CT feature a class-leading 0.15% accuracy while exceeding Measurement Canada requirements for use in metering installations. Its compact size can be used for applications that requires high precision signal transformation.

#### ACCUENERGY.COM/ACUCT-S77

#### **AcuCT S77 Series Options**

	AcuCT S77-100	AcuCT S77-200
Primary Input	100A	200A
Rated Output	80mA, 100mA	80mA, 100mA
Resistance	50 ΜΩ	50 ΜΩ
Burden	0.005	0.005
Window Radius	0.78" (19.7 mm)	0.78" (19.7 mm)
Exterior Radius (in)	2.01	2.01









#### **NEW PRODUCT**

#### Switchgear Solid-Core Current Transformer

High precision solid-core current transformer for permanent installations. The AcuCT S220 features multiple input and output options in a small compact form factor. It provides consistent, reliable measurements across industrial and commercial for general metering or switchgear applications.

ACCUENERGY.COM/ACUCT-S220



#### AcuCT S220 Series Options

	AcuCT S220
Primary Input	300A, 500A, 600A, 800A, 1000A, 1200A, 1500A
Rated Output	5A, 1A, 333mV
Insulation Resistance	500V/100MΩ min
Burden	2.5-5VA
Exterior Dimension	115.0mm x 125.0mm x 32.0mm (4.53" x 4.92" x 1.26")
Window Size	Ø 57.0mm (2.24")

## AcuCT S335





#### **NEW PRODUCT**

#### Busbar Solid-Core Current Transformer

Ideal for mounting to a busbar or a cable, the AcuCT S335 is a solid-core current transformer for permanent installations. Features multiple input and output options in a compact form factor. It provides consistent, reliable measurements across industrial and commercial for general metering applications.

#### ACCUENERGY.COM/ACUCT-S335



#### AcuCT S335 Series Options

	AcuCT S335
Primary Input	500A, 600A, 800A, 1000A, 1200A, 1500A, 2000A, 2500A, 3000A
Rated Output	5A, 1A, 333mV
Insulation Resistance	500V/100MΩ min
Burden	2.5-5VA
Exterior Dimension	146.0mm x 156.0mm x 32.0mm (5.75" x 6.14" x 1.26")
Window Size	Ø 72.0mm (2.83")



## AcuCT S433



#### **NEW PRODUCT**

#### Instrument Solid-Core Current Transformer

The AcuCT 433 is used in permanent metering installations with rated outputs for 5A, 1A, or 333mV. Accuracy rating at 0.5%, it provides consistent, reliable measurements across industrial and commercial for general metering applications.

## AcuCT S650



#### NEW PRODUCT

#### Solid-Core Current Transformer

High accuracy solid-core current transformer for permanent installations. The AcuCT S650 features multiple input and output options in a small compact form factor. It provides consistent, reliable measurements across industrial and commercial for general metering applications.

ACCUENERGY.COM/ACUCT-S433



#### **AcuCT S433 Series Options**

	AcuCT S433
Primary Input	800A, 1000A, 1500, 2000A, 2500A, 3000A, 3500A, 4000A
Rated Output	5A, 1A, 333mV
Insulation Resistance	500V/100M $\Omega$ min
Burden	2.5-5VA
Exterior Dimension	115.0mm x 125.0mm x 32.0mm (4.53" x 4.92" x 1.26")
Window Size	Ø 93.0mm (3.66")

#### ACCUENERGY.COM/ACUCT-S650



#### AcuCT S650 Series Options

	AcuCT S650
Primary Input	800A, 1000A, 1500A, 2000A, 2500A, 3000A, 3500A, 4000A
Rated Output	5A, 1A, 333mV
Insulation Resistance	500V/100MΩ min
Burden	2.5-5VA
Exterior Dimension	220.0mm x 230.0mm x 35.0mm (8.66" x 9.06" x 1.38")
Window Size	160.0mm x 160.0mm (6.30" x 6.30")







#### **DC Current Sensors**

Ideal for retrofit installation, the split-core, nonintrusive design offers seamless integration into any existing DC electrical system using a bus bar or other large conductor. Available in both unidirectional and bidirectional options, measure up to 5000A with a rated output signal of either 4-20mA or 0-5V.

ACCUENERGY.COM/HAB

CE ROHS

## HAK





#### Hall Effect Current Sensors

The HAK Hall Effect current sensor measures DC current up to 1000A with a rated output signal at either 4-20mA or 0-5V. Ideal for sensitive environments, the Hall Effect provides a natural, protective field that isolates the sensor from high electrical fluctuation from the conductor.

#### ACCUENERGY.COM/HAK

CE ROHS

#### Hall Effect Current Series Options

	HAK21	HAK40
Primary Input	50A, 100A, 200A	400A, 600A, 1000A
Rated Output	4-20mA, 0-5V	4-20mA, 0-5V
Window Diameter Size (in)	0.83	1.58
Window Size (mm)	21	40
Exterior Dimension	2.36" x 2.40" x 0.63" (60 x 61 x 16 mm)	3.94" x 3.94" x 0.94" (100 x 100 x 24 mm)
Accuracy	0.	5%
Bidirectional	Opt	ional

#### DC Current Sensor Series Options

	•
	HAB-16555
Primary Input	1000A, 2000A, 3000A, 4000A, 5000A
Rated Output	4-20mA, 0-5V
Window Diameter Size (in)	6.50 x 2.17
Window Size (mm)	165 x 55
Exterior Dimension	3.80" x 9.25" x 1.93" (96 x 235 x 49 mm)
Accuracy	0.5%
Bidirectional	Optional

# HV2





#### **HV2 Series**

The HV2 Hall effect DC voltage sensor series is designed to provide reliable, accurate voltage measurements in DC applications up to 1500V. Ideal for railway, DC coupled energy storage, solar systems, or other high voltage DC installations.

ROHS

#### ACCUENERGY.COM/HV2

#### HV2 Series Options

	HV2-1000	HV2-1200	HV2-1500
Primary Input	1000V	1200V	1500V
Rated Output	0-5Vdc	0-5Vdc	0-5Vdc
Exterior Dimension		6.57" x 2.44" x 3.58" (167.0 x 62.0 x 91.0mm)	
Accuracy	0.50%	0.50%	0.50%
Polarity	Terminal Connection	Terminal Connection	Terminal Connection

## DC Shunts



#### **Shunt Series**

DC current shunts are engineered for precision measurement in DC current systems. Pair with a DC power meter in renewable energy, mass transit, battery charging, heavy industrial environments, and other DC current applications.

#### ROMPLIANT

#### ACCUENERGY.COM/DC-SHUNTS

#### **DC Current Shunt Series Options**

Shunt	50A	100A	200A	500A	1000A	2000A	4000A
Voltage Drop	75mV	75mV	75mV	75mV	75mV	75mV	75mV
Primary Input	50A	100A	200A	500A	1000A	2000A	4000A
Operation Temperature	-40 to +60C	-40 to +60C	-40 to +60C	-40 to +60C	-40 to +60C	-40 to +60C	-40 to +60C
Exterior Dimension	0.98" x 4.72" x 0.87" 25 x 120 x 22mm	0.91" x 4.29" x 0.43" 23 x 109 x 11mm	0.83" x 4.59" x 0.85" 21 x 116.5 x 21.5mm	1.81" x 4.88" x 0.85" 46 x 124 x 21.5mm	3.81" x 4.88" x 0.85" 97 x 124 x 21.5mm	5.35" x 7.87" x 3.82" 136 x 200 x 97mm	7.87" x 7.48" x 3.82" 200 x 190 x 97mm
Accuracy	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%





# AcuCT C

#### **Current Transformer Converter**

AcuCT-C Series access-type precision 5A current transformer is approved by Measurement Canada for rated systems higher than 400A and 800A. Designed with a closed magnetic core, the CT's main benefit is derived from its ultra-micro crystal magnetic core and an advanced secondary winding process to provide stable performance and high accuracy 0.15 measurement.

#### **NEW PRODUCT**

#### ACCUENERGY.COM/ACUCT-C



#### Key Specifications

- Measurement Canada Approved
- IEEE Std C57.13-2016 0.15 class accuracy
- 500V/100MΩ min insulation resistance
- 3,000Vac withstand voltage

#### Phase error < 8'</li>

- Ratio error < 0.5%
- Frequency: 50-60Hz

#### **AcuCT C Series Options**

	AcuCT C	
Input Rating	5A	
Rated Output	80mA, 100mA	
Phase Error	< 8'	
Accuracy	0.15	
Exterior Dimension	2.11" x 3.10" x 1.20" (53.5mm x 78.5mm x 30.5mm)	



CONTACT US FOR

## ENGINEERING DESIGN & SPECIFICATION SUPPORT





#### ACCUENERGY (CANADA) INC. 22 Howden Road

Toronto, ON M1R 3E4, Canada

TF:	1-877-721-8908
INT:	+1-416-497-4100

- FAX: +1-416-497-4130
- E: marketing@accuenergy.com



#### ACCUENERGY PACIFIC AUTOMATION COMPANY LTD. 400 Continental Blvd., Suite 600 El Segundo, CA 90245, USA

TE: 1-877-721-8908







#### ACCUENERGY SOUTH AFRICA (PTY) LTD.

Castle Walk Corporate Park, Block B, Cnr. Nossob & Swakop Street, Erasmuskloof, Pretoria, 0181, South Africa

TF: +27 (0) 87 802 6136

All specifications are subject to change without notice.



www.accuenergy.com